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Addendum: **1**
Date: **10/28/2024**
Project: **Purdue Fort Wayne
Ginsberg Hall Chiller & Control Air Replacement**
Comm #: **24635**

The following items shall be incorporated into the specifications and drawings and are considered to be integral to the bid documents for the project. Acknowledgement of receipt of this addendum is required on the bid form.

Item #1: General Clarifications.

- A. Refer to attached pre-bid meeting minutes and sign-in sheet. Incorporate all items into the project scope of work.

Item #2: Drawing Sheet E001

- A. All new light fixtures and controls to be removed from scope of work. Refer to sheet E-001 removal of light fixture schedule.

Item #3: Drawing Sheet E201

- A. All new light fixtures and controls to be removed from scope of work. Refer to sheet E-201 for revised plan notes and removal of lighting plan and emergency detail.



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Pre-Bid Meeting Minutes

Date: October 28, 2024

Project Name: PFW Ginsberg Chiller Replacement

Project #: 24635

Agenda Items:

- Introductions of Owner Representative, Project Design Team, and Prime Contractors.
 - o Carissa Bloom, Project Manager, cbloom@pfw.edu, 260-481-6806
 - o Kevin Howard, Construction Observer, howardkt@pfw.edu, 260-481-6797
 - o Mike Lubbehusen, Primary Engineering, mlubbehusen@primary-eng.com, 260-657-0500

- Project Information
 - o Bids are due: November 5, 2024 at 11:00am. Room 103 Ginsberg Hall
 - o Bids will then be read aloud in Room 114 Ginsberg Hall
 - o Submit bid forms in duplicate
 - o Review Instructions to Bidders to ensure correct documentation, B-1 through B-8
 - o Substantial completion of the project is: December 31, 2025
 - o Work can start on June 1, 2025 to shut down the existing chiller. Work required to install new pumps, piping, electrical in the new equipment room can start upon approval of contract. Chiller downtime shall be minimized once it is taken offline.

- Project scope of work
 - o Create new mechanical equipment room in old locker room near boiler room.
 - o Set all new pumps, HX, piping etc. as soon as feasible.
 - o Remove and replace existing chiller with new packaged unit and connect to new equipment room.
 - o New controls for chiller plant shall be DDC.
 - o Base bid to remove chiller, refrigerant piping, and evaporator with limited removal in pump room on 2nd floor.
 - o Alternate bid to complete the removal of old pump room equipment and pipe.

- Owner specific requirements
 - o Will likely require a crane lift to replace chiller, must be coordinated with PFW on day to lift and replace chiller to be unoccupied.

- Procedures for site visits, contact Carissa Bloom.

- Deadline for addendum items and additional manufacturers is 3 days prior to bid open at Noon.

- Questions/Comments:
 - o Will noise be an issue cutting concrete in new room? Yes, but just schedule with Owner during normal hours.
 - o There is already a contract running to install new lights in the new equipment room. Do you want to change this? Yes, will remove the new lights from the chiller project in addendum. Current contractor will withhold

installation of their new lights until after piping for the room is installed and then place lights around equipment and pipe.

PFW OWNER SPECIFIC GENERAL NOTES

- ALL HVAC SYSTEMS AFFECTED BY THIS PROJECT SHALL BE TESTED AND BALANCED BY FLUID DYNAMICS. OWNER SHALL REMAIN AS DIRECT CONTACT. CONTRACTOR SHALL SCHEDULE.
- ALL FIRE-RATED PENETRATIONS MUST COMPLY WITH UL-LISTED ASSEMBLY. CONTRACTOR SHALL SUBMIT WITH ASSEMBLY DRAWING PRIOR TO INSTALLATION.
- DO NOT INSTALL EQUIPMENT MORE THAN 24" ABOVE LAY-IN CEILING TO ALLOW ACCESS VIA LADDER THROUGH CEILING.
- ALL CONDUIT, PIPE, DUCT, ETC. SHALL BE ROUTED IN AN ORDERLY FASHION AT RIGHT ANGLES TO THE BUILDING STRUCTURE UNLESS SHOWN OTHERWISE.
- ALL WALL PENETRATIONS SHALL BE SEALED WITH ACOUSTIC CAULK IF NOT A FIRE RATED ASSEMBLY. CONDUIT SHALL BE COLOR CODED AS FOLLOWS:
 FIRE ALARM = RED
 TEMPERATURE CONTROLS = YELLOW
 USE ALLIED TRUE-COLOR CONDUIT OR EQUAL. JUNCTION BOXES DO NOT NEED PAINTED.
- ALL ELECTRIC CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE TO MAXIMIZE SPACE FOR DUCT TYPES UNLESS SHOWN OTHERWISE.
- ALL VALVES WITH SWEAT/COPPER CONNECTIONS SHALL HAVE A UNION DOWN STREAM OF VALVE. BALL VALVES SHALL HAVE THREADED CONNECTIONS. MECHANICAL PRESS JOINTS ARE EXEMPT.
- ALL ITEMS INSTALLED ABOVE CEILING MUST HAVE A MINIMUM OF 1" CLEARANCE ON ALL SIDES TO PREVENT VIBRATION/RATTLING OF OTHER MATERIALS.
- CONTRACTOR SHALL COORDINATE WITH OWNER TO SCHEDULE ABOVE CEILING PUNCH PRIOR TO CEILING TILES BEING DROPPED.
- APPROVED VAV MANUFACTURERS:
 a. TITUS
 b. PRICE
- ALL FLEX DUCT SHALL HAVE INNER STAINLESS STEEL HOSE CLAMP BAND AND OUTER PLASTIC ZIP-TIE/PANCAUIT STRAP TO SEAL PROPERLY.
- FLEX DUCT IS NOT PERMITTED TO CHANGE DIRECTION OF AIRFLOW. FLEX DUCT IS ONLY PERMITTED IN VERTICAL (4) MAX AND HORIZONTAL (2) MAX.
- ALL DUCTWORK SHALL BE CONSTRUCTED WITHOUT JOINT TIE RODS AND MIDPOINT TIE RODS TO MEET SPACNA COMPLIANCE.
- ALL EQUIPMENT SHALL BE MOUNTED OFF FINISHED FLOOR WITH GROUT OR CONCRETE PAD.
- CONTRACTOR SHALL COORDINATE WITH OWNER TO INSPECT DUCTWORK AND PIPING BEFORE INSULATION IS INSTALLED.
- REMOVE ALL UNUSED AND ABANDONED MATERIALS WITHIN CEILING PLENUMS.

LINE TYPE SCHEDULE

---	UNDERGROUND COMMUNICATION, LINE TYPE AND WEIGHT
---	UNDERGROUND BRANCH CIRCUIT, LINE TYPE AND WEIGHT
---	NEW POWER LINE WEIGHT
---	NEW MECHANICAL EQUIPMENT LINE WEIGHT
---	NEW LIGHTING LINE WEIGHT
---	NEW LIGHTING DEVICE LINE WEIGHT
---	NEW EMERGENCY AND FIRE DEVICE LINE WEIGHT
---	NEW COMMUNICATION DEVICE LINE WEIGHT
---	EXISTING TO REMAIN LINE WEIGHT
---	EXISTING TO BE DEMOLISHED LINE TYPE AND WEIGHT

GENERAL ELECTRICAL DEMOLITION NOTES

- REMOVE ALL EXPOSED RACEWAY AND WIRE THAT ARE NO LONGER TO BE USED.
- BLANK OFF OR REMOVE ALL ABANDONED JUNCTION AND OUTLET BOXES IN WALLS, FLOORS, AND CEILINGS THAT ARE TO REMAIN.
- REMOVE ALL ELECTRICAL OUTLETS, DEVICES, AND RACEWAYS FROM WALL THAT ARE TO BE REMOVED.
- REMOVE ALL FLOOR MOUNTED RACEWAYS.
- ALL EXISTING EQUIPMENT THAT IS TO REMAIN IS INTENDED TO BE OPERATIONAL AT THE COMPLETION OF THE PROJECT. RE-CIRCUIT WHERE NECESSARY TO INSURE THIS CONTINUED OPERATION.
- OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT THAT IS TO BE REMOVED.
- ALL EXISTING RECEPTACLES AND LIGHT SWITCHES THAT ARE TO REMAIN WITHIN A REMODELED AREA SHALL BE REPLACED WITH NEW DEVICES AND COVER PLATES.
- THE EXISTING EQUIPMENT SHOWN ON THE DRAWINGS IS BELIEVED TO BE A REASONABLE INDICATION OF THE EXISTING LAYOUT. EXACT QUANTITY AND LOCATION SHALL BE FIELD VERIFIED BY CONTRACTOR.

ELECTRICAL ABBREVIATIONS SCHEDULE

A OR AMP	AMPERE	EMH	ELECTRICAL WATER HEATER	MH	METAL HALIDE
AC	ABOVE COUNTER	EXIST	EXISTING	MIN	MINIMUM
A/E	ARCHITECT/ENGINEER	EXT	EXTERIOR	MISC	MISCELLANEOUS
AFF	ABOVE FINISHED FLOOR	F	FURNACE	M	MASONRY OPENING
AFG	ABOVE FINISHED GRADE	FA	FIRE ALARM	#	NUMBER
AHU	AIR HANDLING UNIT	FAA	FIRE ALARM ANNUNCIATOR	NC	NORMALLY CLOSED
ALT	ALTERNATE	FAQP	FIRE ALARM CONTROL PANEL	NT	NOT IN CONTRACT
APPROX	APPROXIMATELY	FOU	FAN COIL UNIT	NL	NIGHT LIGHT
A/WC	AMERICAN WIRE GAUGE	FDN	FOUNDATION	NO	NORMALLY OPEN
BLDG	BUILDING	FIN	FINISH	NOM	NOMINAL
BLKG	BLOCKING	FT	FLUORESCENT FOOT	NTS	NOT TO SCALE
BTM	BOTTOM	FTT	FOOT	OC	OPENING ABOVE CEILING
C	CONDUIT	FTC	FOOT CANDLE	OC	ON CENTER
CB	CIRCUIT BREAKER	G OR EOC	GROUND	OD	OVERHEAD POWER LINES
CL	CENTERLINE	GA	GAUGE	PH	PHASE
CFM	CUBIC FEET PER MINUTE	GFCI OR GFI	GROUND FAULT CIRCUIT INTERRUPTER	LB	POUND
CUH	CABINET UNIT HEATER	GR	GALVANIZED RIGID CONDUIT	PH	PLUMBING CONTRACTOR
CLG	CEILING	GW	GAS WATER HEATER	PC	POST INDICATING VALVE
CMU	CONCRETE MASONRY UNIT	HT	HEIGHT	PVC	POLYVINYL CHLORIDE
COL	COLUMN	HORIZ	HORIZONTAL	R	RADIUS
CMC	CONCRETE	HPS	HIGH PRESSURE SODIUM HOUR	REQ	REQUIRED
CMC BLK	CONCRETE BLOCK	ID	INSIDE DIAMETER	RM	ROOM
CONST	CONSTRUCTION	IG	ISOLATED GROUND	RO	ROUGH OPENING
CONTR	COPPER	IMC	INTERMEDIATE METAL CONDUIT	RTU	ROOF TOP UNIT
DC	DIRECT CURRENT	INSUL	INSULATION	SCHED	SCHEDULE
DEG	DEGREE	INT	INTERIOR	SM	SIMILAR
DEG	DEGREE	INFO	INFORMATION	SPEC	SPECIFICATION
DET	DETAIL	KWH	THOUSAND CIRCULAR MILLS	SQ	SQUARE
DM	DIMENSION	KVA	KILOVOLT-AMPERE	SS	STAINLESS STEEL
DWG	DRAWING	KWH	KILOWATT-HOUR	STD	STANDARD
E	ELECTRICAL CONTRACTOR	KW	KILOWATT	STL	STEEL
EF	EXHAUST FAN	LP	LIGHT POLE	SUSP	SUSPENDED
ELEC	ELECTRICAL	MAU	MAKE-UP AIR UNIT	TS	TEACHERS STATION
EM	EMERGENCY	MAX	MECHANICAL CONTRACTOR	TS	TELEPHONE TERMINAL BOARD
EMT	ELECTRICAL METALLIC TUBING	MCC	MOTOR CONTROL CENTER	TYP	TYPICAL
EQ	EQUAL	MEM	MECHANICAL MANUFACTURER	UL	UNIT HEATER UNDERWRITERS LABORATORIES
EWC	ELECTRIC WATER COOLER	MFR	MANUFACTURER		

GENERAL ELECTRICAL NOTES

- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS.
- DIMENSIONS SHOWN ON OUTLET BOXES AND DEVICES SHALL BE TO THE BOTTOM OF THE BOX.
- CONDUIT SHOWN TO LIGHT FIXTURES IS SHOWN TO INDICATE SWITCHING AND DOES NOT REPRESENT THE QUANTITY OR EXACT LOCATION OR WIRING AND/OR CONDUIT.
- COORDINATE LOCATION OF LIGHT FIXTURES IN AREAS OF MECHANICAL DUCTWORK AND PIPING WITH MECHANICAL CONTRACTOR. RELocate LIGHT FIXTURES, WIRING, AND CONDUIT IF NECESSARY AND AS DIRECTED BY THE ARCHITECT/ENGINEER.
- VERIFY LOCATION OF ALL BACKBOXES IN LABORATORY EQUIPMENT AND BUILT-IN FURNITURE WITH EQUIPMENT SUPPLIER AND INSTALLER PRIOR TO ROUGH-IN.
- PROVIDE AND INSTALL PLASTER RINGS, DRYWALL FRAMING KITS, OR SURFACE MOUNT KITS FOR LIGHT FIXTURES WHERE REQUIRED BY CEILING CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS.
- VERIFY HEIGHT AND LOCATION OF RECEPTACLES BEHIND ELECTRIC WATER COOLERS WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- THE ELECTRICAL LAYOUT DRAWINGS ARE DIAGNOSTIC IN NATURE. REFER TO ENTIRE CONSTRUCTION DRAWING SET AND SPECIFICATIONS FOR GUIDANCE ON DIMENSIONS, CEILING HEIGHTS, DOOR SWINGS, ROOM FINISHES, STRUCTURAL DETAILS, LOCATIONS OF PIPING, DUCTWORK, STRUCTURAL MEMBERS, AND OTHER OBSTRUCTIONS. INSTALL THE ELECTRICAL SYSTEMS SO AS NOT TO INTERFERE WITH THE INSTALLATION OR FUNCTION OF ANY WORK BY ANOTHER DISCIPLINE.
- ALL DIMENSIONS OF EXISTING DEVICES AND EQUIPMENT ARE APPROXIMATE. CONTRACTOR SHALL MAKE ALL NECESSARY FIELD MEASUREMENTS OF EXISTING STRUCTURES AND EQUIPMENT TO VERIFY DIMENSIONS SHOWN ON THE PLANS. ALL ADDED COSTS TO MODIFY NEW CONSTRUCTION DUE TO A LACK OF COORDINATION AND FIELD MEASUREMENTS SHALL BE BORNE BY THE CONTRACTOR.
- PROVIDE ADDITIONAL SUPPORT FOR SWITCHES, STARTERS, RACEWAY, GROUNDING SYSTEMS, AND OTHER ELECTRICAL EQUIPMENT WHEREVER THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
- ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, AND CEILINGS SHALL BE SEALED WITH FIRE STOPPING MATERIAL EQUAL TO THOMAS AND BETTS U.L. LISTED FLAME-SAFE FIRE STOP SYSTEM.
- COORDINATE ALL EQUIPMENT WIRING WITH MFR'S REQUIREMENTS. CHANGES REQUIRED FROM THE USE OF PRODUCTS THAT ARE OTHER THAN THE BASIS OF DESIGN SHALL BE BORNE BY THE CONTRACTOR.
- SIZING OF BRANCH CIRCUITS AND FEEDERS FOR EQUIPMENT IS BASED ON DESIGN LOADS. PRIOR TO INSTALLATION, CONFIRM EXACT LOADS WITH RELEASED SHOP DRAWINGS. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO ROUGH-IN.
- BRANCH CIRCUITS SHALL BE WIRED WITH 34°C, 2412, 1-#120, UNLESS NOTED OTHERWISE. NEUTRAL CONDUCTORS SHALL NOT BE SHARED ON BRANCH CIRCUITS.
- WHERE CONDUIT AND WIRING HAS NOT BEEN SHOWN ON THE DRAWINGS, THE ARRANGEMENT AND ROUTING OF LIGHTING AND RECEPTACLE BRANCH CIRCUITS SHALL BE AT THE DISCRETION OF CONTRACTOR IN ACCORDANCE WITH GENERALLY ACCEPTED GOOD PRACTICE, N.E.C. REQUIREMENTS, AND THE FOLLOWING LIMITATIONS:
 120V, 20 AMP DOUBLE DUPLEX RECEPTACLE, 16" A.F.F. UNO, "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.
 120V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.
 120V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.
 120V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.
- EXCEPT WHERE NOTED OTHERWISE, SIZE BRANCH CIRCUIT CONDUCTORS WITHIN THE FOLLOWING MAXIMUM LENGTH LIMITS. (MEASURE TO THE CENTER OF THE LOAD FOR LIGHTING AND TO THE MOST REMOTE OUTLET FOR RECEPTACLE CIRCUITS).

CIRCUIT BREAKER	CIRCUIT LENGTH	CONDUCTOR SIZE
120V, 20 A	100 FEET	#12
	150 FEET	#10
	200 FEET	#8
- PROVIDE #12 AWG MINIMUM FOR BRANCH CIRCUITS. PROVIDE ADDITIONAL DERATING PER N.E.C. TABLES 310-16 THROUGH 310-31 FOR ALL HOME RUNS WITH MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A RACEWAY.
- CONDUITS SHALL BE LIMITED TO A MAXIMUM OF NINE BRANCH CIRCUIT CONDUCTORS OF WHICH A MAXIMUM OF FOUR PHASE CONDUCTORS SHALL BE PERMITTED. GROUNDING CONDUCTORS SHALL NOT BE INCLUDED IN THE COUNT.
- FOR EQUIPMENT THAT IS TO BE FURNISHED BY OTHERS AND WIRED BY THIS CONTRACTOR, REVIEW ALL SPECIFICATION SECTIONS, EQUIPMENT SCHEDULES, AND/OR DRAWING DETAILS THAT PERTAIN TO THIS EQUIPMENT AND INCLUDE ALL WIRING AND DEVICES REFERENCED. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF THIS EQUIPMENT WITH EQUIPMENT INSTALLER PRIOR TO ROUGH-IN INSTALLATION.
- CONDUIT, BOXES, AND WIRING DEVICES IN ALL AREAS SHALL BE INSTALLED IN CONCEALED SPACES OR RECESSED IN WALLS UNLESS IN MECHANICAL/ELECTRICAL EQUIPMENT ROOMS OR AS DIRECTED BY THE ARCHITECT/ENGINEER.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ROUGH-IN OF TEMPERATURE CONTROL DEVICES. CONTRACTOR SHALL PROVIDE AND INSTALL BACK BOXES AND CONDUIT WITH BUSHING TO NEAREST ACCESSIBLE CEILING. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS. COORDINATE WITH MECHANICAL CONTRACTOR.
- ELECTRIC WATER COOLERS (EWC) DUPLEX RECEPTACLE ON SYMBOL SCHEDULE) SHALL BE PROTECTED BY GFCI PROTECTED CIRCUIT BREAKER IN PANEL BOARD UNLESS OTHERWISE NOTED. PROVIDE AT ALL LOCATIONS.
- ALL HVAC CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR UNLESS NOTED OTHERWISE.

ELECTRICAL SYMBOLS SCHEDULE

	RECESSED PANELBOARD		CIRCUIT HOME RUN TO PANELBOARD
	SURFACE MOUNTED PANELBOARD		SWITCH, "X" DENOTES SWITCH TYPE. SEE SWITCH TYPES BELOW.
	MOTOR CONTROL CENTER, "X" DENOTES EQUIPMENT TAG.		SWITCH, "X" DENOTES SWITCHING FOR LIGHTS.
	TRANSFORMER, "XX" INDICATES TRANSFORMER TAG. REFER TO SCHEDULES AND/OR RISER DIAGRAM	<u>SWITCH TYPES</u>	
	FUSIBLE DISCONNECT, "XXX" DENOTES MAX. AMPACITY OF DISCONNECT	120/277 V, DOUBLE POLE 20 AMP AC SWITCH	
	NON-FUSIBLE DISCONNECT, "XXX" DENOTES MAX. AMPACITY OF DISCONNECT	120/277 V, THREE WAY 20 AMP AC SWITCH	
	ENCLOSED CIRCUIT BREAKER, SIZE INDICATES BY "XXX" DENOTES FRAME SIZE.	120/277 V, FOUR WAY 20 AMP AC SWITCH	
	COMBINATION MOTOR STARTER AND FUSED DISCONNECT SWITCH. MS-XX DENOTES STARTER TAG, REFER TO MOTOR STARTER SCHEDULE.	120/277 V, 0-10V DIMMER SWITCH	
	VARIABLE FREQUENCY/SPEED DRIVE, PROVIDED BY MECHANICAL CONTRACTOR. INSTALLED BY ELECTRICAL CONTRACTOR.	120/277 V, 20 AMP AC MOUNTED OCCUPANCY SENSOR, "X" DENOTES SWITCH TYPE.	
	COOPER INDUSTRIES MOTOR GUARD WITH 15A TOGGLE SWITCH AND EDISON BASE FUSE HOLDER. "XXAF" DENOTES THE OVERCURRENT PROTECTION FOR FUSEHOLDER	120/277 V, SWITCH MOUNTED WITH PILOT LIGHT	
	RED MUSHROOM HEAD EMERGENCY POWER OFF BUTTON	LIGHT FIXTURE, "XX" DENOTES FIXTURE TYPE, "ab" DENOTES SWITCHING	
	LINE VOLTAGE THERMOSTAT, THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR, ROUGH-IN AND INSTALLATION BY ELECTRICAL CONTRACTOR.	EMERGENCY LIGHT FIXTURE, "XX" DENOTES FIXTURE TYPE, "A" DENOTES GENERATOR TRANSFER DEVICE OR EMERGENCY BATTERY INVERTER, "ab" DENOTES SWITCHING.	
	MOTOR CONNECTION.	FIRE ALARM HORN/VISUAL, CEILING MOUNT	
	120 V, 20 AMP DUPLEX RECEPTACLE 16" A.F.F. UNO, "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM VISUAL, CEILING MOUNT	
	120 V, 20 AMP DOUBLE DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE CASEWORK SURFACE, UNO, "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM CEILING MOUNTED SMOKE DETECTOR	
	120 V, 20 AMP DOUBLE DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE CASEWORK SURFACE, UNO, "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM CEILING MOUNTED CARBON MONOXIDE SENSOR	
	120 V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM CEILING MOUNTED HEAT DETECTOR	
	120 V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM HORN/VISUAL, 80" A.F.F., UNO.	
	120 V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM VISUAL, 80" A.F.F., UNO, "WG" DENOTES WIRE GUARD	
	120 V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM HORN, 80" A.F.F., UNO	
	120 V, 20 AMP HORIZONTAL DUPLEX RECEPTACLE AT 44" A.F.F. OR 6" ABOVE WORK SURFACE "X" DENOTES RECEPTACLE TYPE. SEE RECEPTACLE TYPES BELOW.	FIRE ALARM VISUAL, 80" A.F.F., UNO, "WP" DENOTES WEATHER PROOF	
	RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER AT 16" A.F.F., UNO.	FIRE ALARM CEILING MOUNTED HEAT DETECTOR	
	RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER AND WHILE-IN-USE WEATHER RESISTANT COVERPLATE MOUNTED HORIZONTAL AT 24" A.F.F., UNO.	FIRE ALARM HORN/VISUAL, 80" A.F.F., UNO.	
	HORIZONTALLY MOUNTED SURFACE RACEWAY	FIRE ALARM VISUAL, 80" A.F.F., UNO, "WG" DENOTES WIRE GUARD	
	VERTICALLY MOUNTED SURFACE RACEWAY	FIRE ALARM HORN, 80" A.F.F., UNO	
	MULTI-OUTLET ASSEMBLY WITH OUTLETS ON CENTER AS INDICATED ON THE DRAWING OR SPECIFICATIONS, MOUNTED 6" ABOVE COUNTER, UNO.	FIRE ALARM VISUAL, 80" A.F.F., UNO, "WP" DENOTES WEATHER PROOF	
	TEMPERATURE CONTROL PANEL, PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR	FIRE ALARM CEILING MOUNTED HEAT DETECTOR	
	WALL SLEEVE, "X" DENOTES DIAMETER	FIRE ALARM HORN/VISUAL, 80" A.F.F., UNO.	
	DATA OUTLET, MOUNTED AT 16" AFF, UNO, "X" DENOTES NUMBER OF DROPS	FIRE ALARM VISUAL, 80" A.F.F., UNO, "WG" DENOTES WIRE GUARD	
	CALL OUT, "X" DENOTES DETAIL NUMBER, "Y" DENOTES DRAWING SHEET NUMBER	FIRE ALARM HORN, 80" A.F.F., UNO	

*** NOT ALL SYMBOLS USED ON THIS PROJECT**

EQUIPMENT SCHEDULE

EQUIPMENT DESIGNATION	EQUIPMENT LOCATION	EQUIPMENT LOAD	VOLTAGE/PHASE	CIRCUIT INFORMATION			DISCONNECT				VARIABLE FREQUENCY/SPEED DRIVE (VFD/VSD)	SOLID STATE MOTOR STARTER				REMARKS			
				CONDUIT AND CONDUCTOR SIZE	BRANCH CIRCUIT DESIGNATION	PROVIDED BY	FUSED OR NON-FUSED	NEMA ENCLOSURE	DISCONNECT SWITCH SIZE	FUSE RATING		EQUIPMENT MOUNTED CONTROL PANEL	PROVIDED BY	INSTALLED BY	PROVIDED BY		NEMA SIZE	CONTROL	TYPE
CHLR-1		401 MCA	208V/3PH	REFER TO SHEET E-201 DETAIL #2	MDP	INT													
VSD-1	SERVING CHWP-1	7.5 HP	208V/3PH	3/4"C, 3-#8, 1-#10 GROUND	"B"	INT													1
CHWP-1	SERVING CHWP-2	7.5 HP	208V/3PH	3/4"C, 3-#8, 1-#10 GROUND	"L.P.C"	INT													1
VSD-3	SERVING CHWP-3	5 HP	208V/3PH	3/4"C, 3-#10, 1-#10 GROUND	"B"	INT													1
CHWP-3	SERVING CHWP-4	5 HP	208V/3PH	3/4"C, 3-#10, 1-#10 GROUND	"B"	INT													1

SCHEDULE ABBREVIATIONS

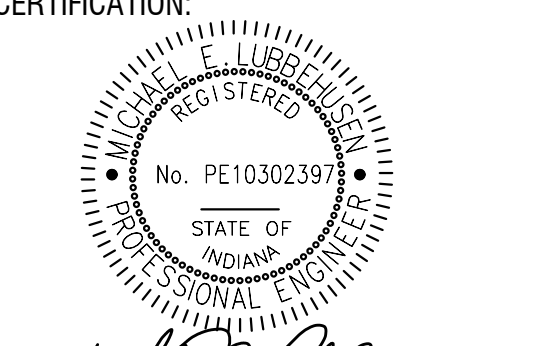
A	AMPACITY	HLO	HIGH/LOW/OFF SWITCH	MHLO	MOMENTARY HIGH/LOW/OFF SWITCH
EC	ELECTRICAL CONTRACTOR	HOA	HAND/OFF/AUTO	NF	NON-FUSED
EX	EXISTING EQUIPMENT	HP	HORSE POWER	O	OWNER FURNISHED AND INSTALLED
F	FUSED	INT	INTEGRAL WITH EQUIPMENT	RLA	RUNNING LOAD AMPS
FLA	FULL LOAD AMPS	LOR	LOCAL/OFF REMOTE SWITCH	S	ON/OFF SWITCH
FVNR	FULL VOLTAGE NON-REVERSING	M	MOMENTARY ON/OFF SWITCH	W	WATTS
FVR	FULL VOLTAGE REVERSING	MC	MECHANICAL CONTRACTOR	XAYP	X AMP CIRCUIT BREAKER, Y POLE
G	GENERAL CONTRACTOR	MCA	MIN CIRCUIT AMPACITY	XAF	SWITCH WITH X AMP FUSE(S)
HL	HIGH/LOW SWITCH	MHL	MOMENTARY HIGH/LOW SWITCH		

REMARKS

1. INSTALL DRIVE PROVIDED BY OTHER TRADES.

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PURDUE UNIVERSITY FORT WAYNE
GINSBERG HALL CHILLER & CONTROL AIR REPLACEMENT - 2024
 Hamlett Dr.
 Fort Wayne, Indiana 46835



No.	Description	Date
1	ADDENDUM #1	10/28/24

DATE: 10-3-24
 COMM: 24635

ELECTRICAL INFORMATION SHEET

SHEET: **E001**

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PURDUE UNIVERSITY FORT WAYNE
GINSBERG HALL CHILLER & CONTROL AIR REPLACEMENT - 2024
 Hamlett Dr.
 Fort Wayne, Indiana 46835

CERTIFICATION:

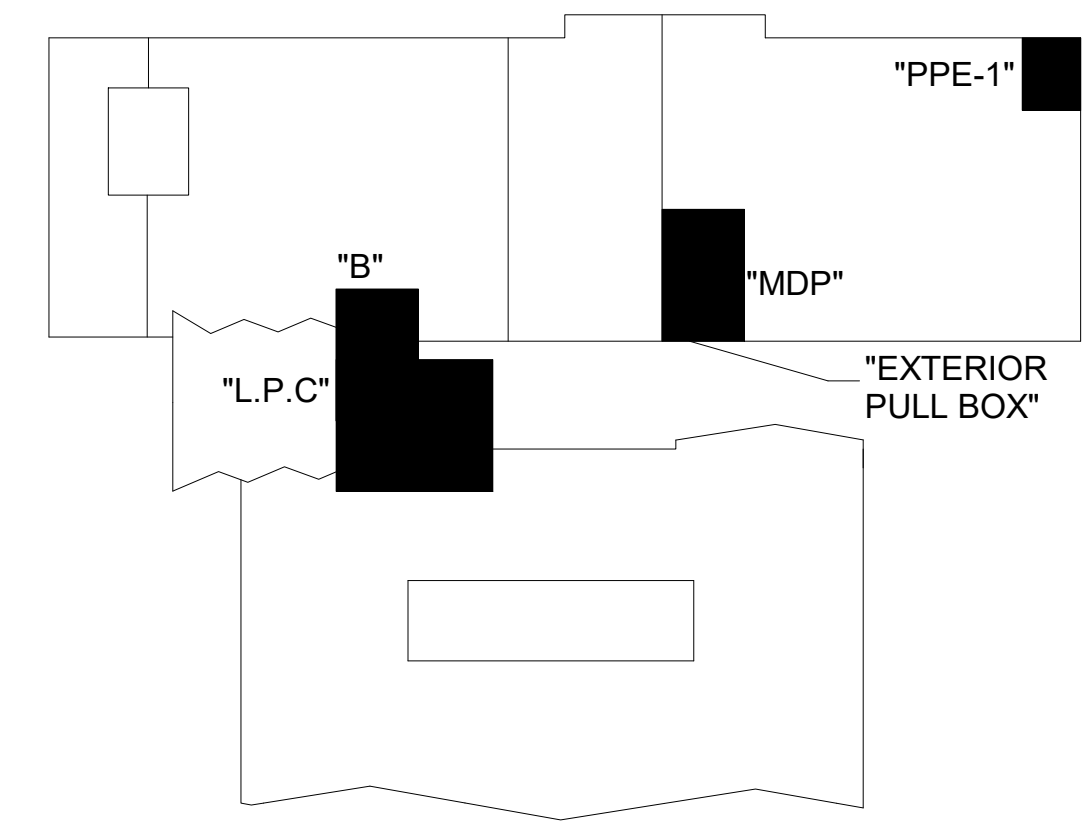
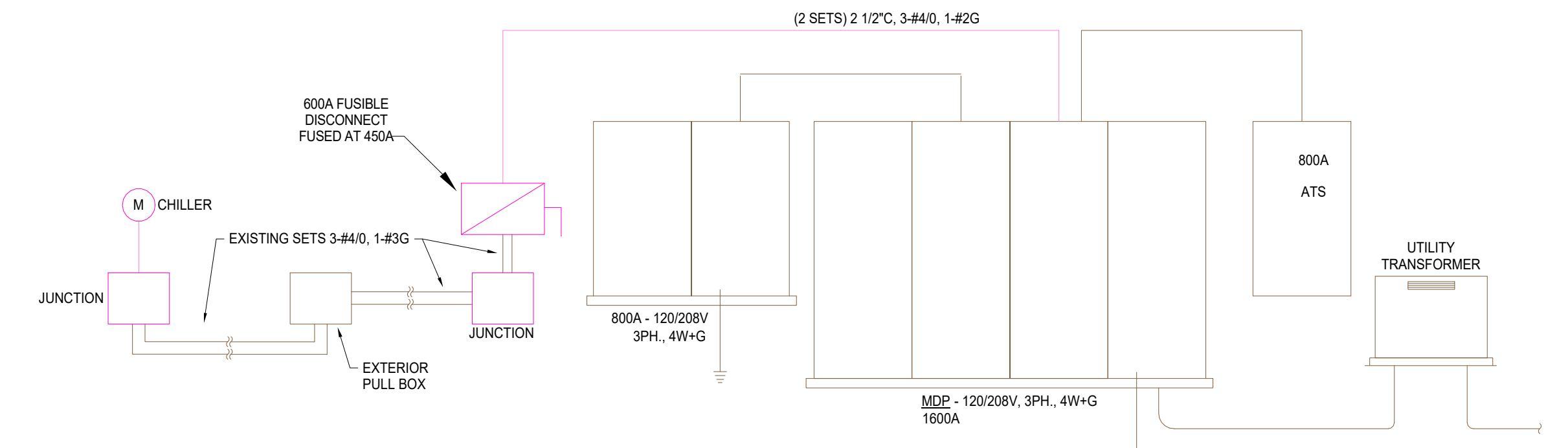
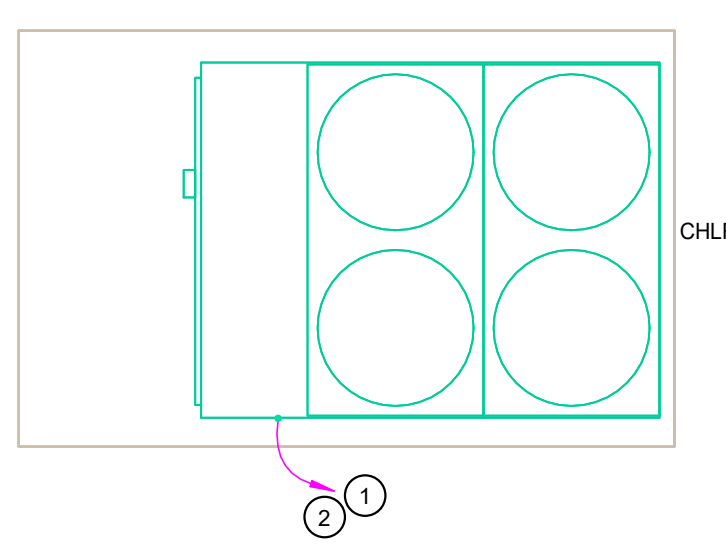
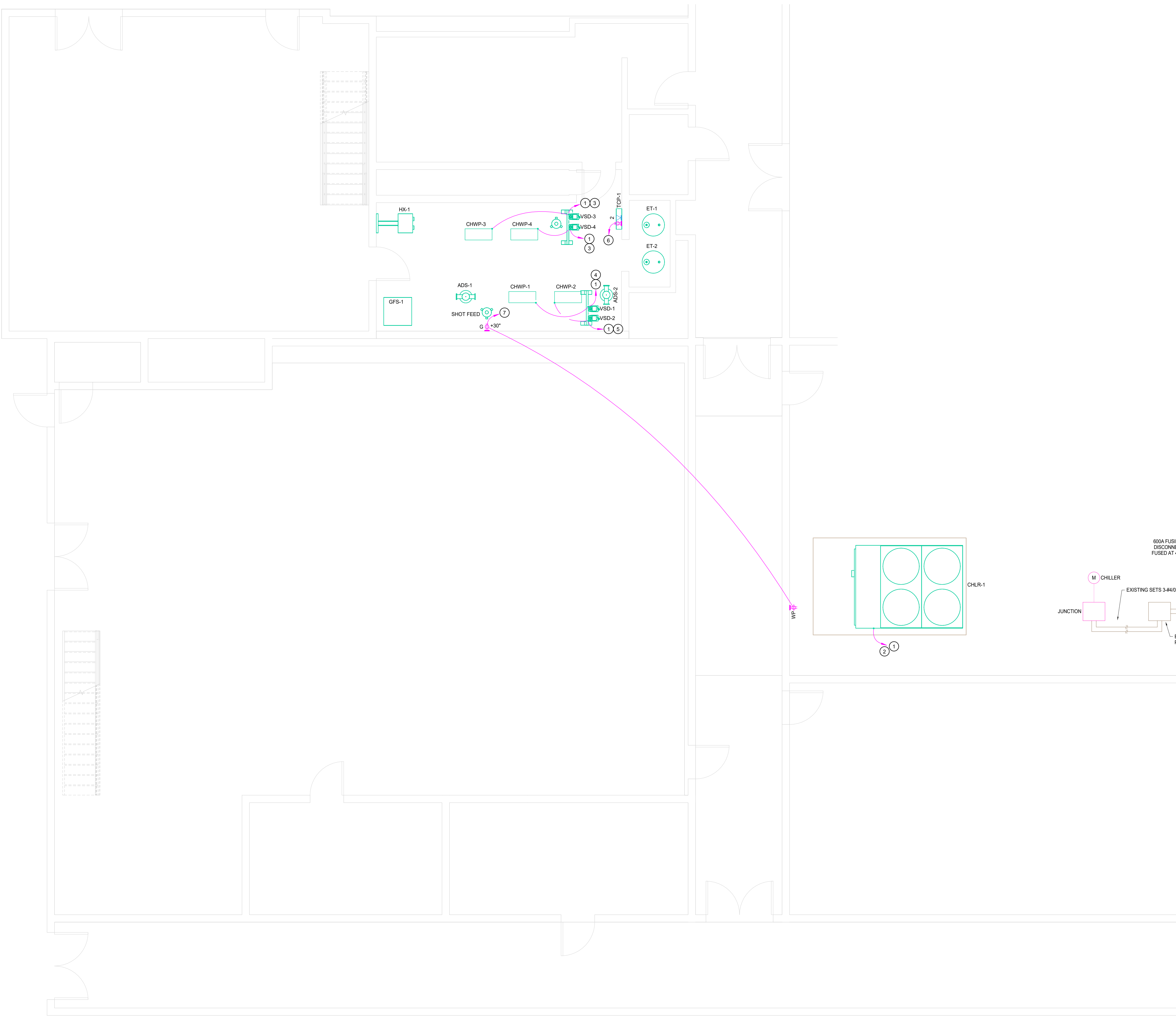
No.	Description	Date
1	ADDENDUM #1	10/28/24

DATE: 10-3-24
 COMM: 24635

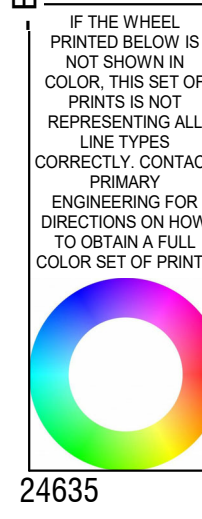
TITLE:
ELECTRICAL PLAN

SHEET:
E201

- PLAN NOTES**
- COORDINATE LOCATION, ROUGH-IN AND ELECTRICAL REQUIREMENTS WITH CONTRACTOR AND APPROVED SHOP DRAWINGS PRIOR TO ROUGH-IN. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
 - PROVIDE AND INSTALL 600A FUSIBLE DISCONNECT FUSED AT 450A. TAP ON TO HORIZONTAL BUSSING IN SECOND SECTION. INTERCEPT AND REROUTE EXISTING WIRING AND CONDUIT SERVING CHILLER, AS REQUIRED. CONNECT TO NEW DISCONNECT AND NEW CHILLER USING EXISTING WIRING. REFER TO DETAIL #2 FOR ADDITIONAL INFORMATION.
 - CONNECT TO EXISTING SPARE 208V 3P 30A FUSIBLE SWITCH IN PANEL "B", SWITCHED OFF. REPLACE EXISTING FUSES WITH NEW 25A FUSES. ASSOCIATED EXISTING WIRING TO FUSIBLE SWITCH TO BE REMOVED.
 - CONNECT TO EXISTING SPARE 208V 3P 60A FUSIBLE SWITCH IN PANEL "B", SWITCHED OFF. REPLACE EXISTING FUSES WITH NEW 40A FUSES. ASSOCIATED EXISTING WIRING TO FUSIBLE SWITCH TO BE REMOVED.
 - PROVIDE AND INSTALL NEW 208V 3P 50A BREAKER USING AVAILABLE SPACE IN PANEL "L.P.C." MOUNT SURFACE RACEWAY, CUT AND PATCH WALL AS REQUIRED FOR CONNECTION TO EXISTING RECESSED PANEL.
 - PROVIDE AND INSTALL DEDICATED SURFACE MOUNT RECEPTACLE AND TELECOMMUNICATION OUTLET ROUGH-IN. DATA CABLING BY OWNER. ADJACENT TO TEMPERATURE CONTROL PANEL (TCP) CONNECT TO EXISTING 20A 1P SPARE BREAKER IN PANEL "L.P.C.", SWITCHED OFF. MOUNT SURFACE RACEWAY, CUT AND PATCH WALL AS REQUIRED FOR CONNECTION TO EXISTING RECESSED PANEL. COORDINATE LOCATION AND POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. ROUTE DATA ROUGH-IN TO ABOVE NEAREST ACCESSIBLE CEILING USING MINIMUM 3/4" C.
 - PROVIDE AND INSTALL SURFACE MOUNT RECEPTACLES. CONNECT TO EXISTING 20A 1P SPARE BREAKER IN PANEL "L.P.C.", SWITCHED OFF. MOUNT SURFACE RACEWAY, CUT AND PATCH WALL AS REQUIRED FOR CONNECTION TO EXISTING RECESSED PANEL.



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SCALE: 1/16" = 1'-0" SCALE: 3/32" = 1'-0" SCALE: 1/8" = 1'-0" SCALE: 1/4" = 1'-0" SCALE: 1/2" = 1'-0" SCALE: 3/4" = 1'-0" SCALE: 1" = 1'-0"